**3GPP TSG-WG SA2 Meeting #152E e-meeting *S2-2206111***

**Elbonia, Aug17th – 26th, 2022 (revision of S2-220xxxx)**

**Source: Samsung, Huawei**

**Title: Conclusion for FS\_GMEC KI#5**

**Document for: Approval**

**Agenda Item: 9.2**

**Work Item / Release: FS\_GMEC / Rel-18**

*Abstract: Providing Conclusion for KI#5.*

# 1. Introduction/Discussion

Based on evaluations of solutions for KI#5, it is proposed to update the conclusion for KI#5.

Since sol#6 and sol#17 both assume that the data sent to different groups corresponds to data with different destinations and the UE can determine how to send the data toward a group, their principles or approaches are in line and the scenarios are complementary. Hence, it is proposed to adopt sol#6 and sol#17 when the application on the UE can replicate multiple copies of the data.

Since sol#7 is the only solution to address the case where UE application is not capable to replicate multiple copies of the data, so sol#7 is used for such case.

# 2. Text Proposal

It is proposed to capture the following changes to TR 23.700-74.

\* \* \* \* First change \* \* \* \*

## 8.5 Key Issue #5: Allowing UE to simultaneously send data to different groups with different QoS policy

Solution #6 and Solution #17 shall be the baseline for the solution.

- If different groups (IP/Ethernet multicast groups) are associated to the same DNN and S-NSSAI combination used for 5G VN group, then different QoS Flows of single PDU Session may be used to transfer the data copy sent to different groups

- If different groups (IP/Ethernet multicast groups) are associated to the different DNN and S-NSSAI combinations used for 5G VN group, then different PDU Sessions are used to transfer the data copy sent to different groups

In case when UE/Application is not capable to replicate multiple copies of the data, the following are way forwards.

-    UE establishes a PDU Session to a DNN/S-NSSAI, as per R17 specifications. This can be a special DNN/S-NSSAI configured by the operator for e.g. an electrical system.

- Each group and group combination is associated with a separate multicast address

-  UE sends traffic to a multicast address depending on what group(s) it wants to target. This allows a UE to send a single packet reaching multiple destinations and also multiple groups.

-  Each UE has a QoS policy where a multicast address is associated with a QoS level. The QoS level is set according to the QoS requirements for the group(s) the address represents. Corresponding QoS Flow(s) is activated on each UE’s PDU Session.

-    UE sends one UL copy on the multicast address representing the destination group(s), and with the corresponding QoS, and UPF(s) are responsible for multicast packet forwarding, as per existing functionality.

\* \* \* \* End of changes \* \* \* \*